

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
3 June 2004 (03.06.2004)

PCT

(10) International Publication Number
WO 2004/046671 A3

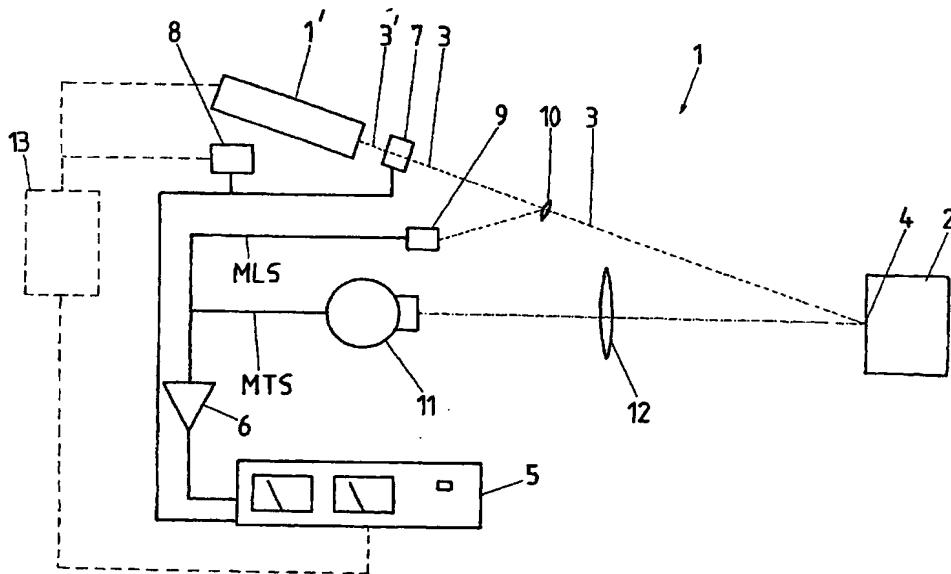
- (51) International Patent Classification⁷: G01N 25/18, G01K 17/20
- (21) International Application Number: PCT/EP2003/050854
- (22) International Filing Date: 20 November 2003 (20.11.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 02360318.6 20 November 2002 (20.11.2002) EP
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR MEASURING THE THERMAL DIFFUSIVITY



(57) Abstract: The present invention concerns a method and a system for measuring the thermal diffusivity. Said method comprises the steps of: - subjecting a surface region of an object to a modulated heating beam (3) while providing a signal (MLS) thereof, the heated spot or area (4) of the surface of the sample (2) having a definitive diameter and a fixed intensity distribution profile; - providing a signal (MTS) proportional to the temperature of the heated spot area (4); - determining the phase difference between the modulated beam signal (MLS) and the resulting modulated temperature signal (MTS); - using said determined phase difference and the associated frequency to work out the thermal diffusivity value of said object (2).

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(88) Date of publication of the international search report:
29 July 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50854

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G01N25/18 G01K17/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 G01N G01K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 713 665 A (KATO HIDEYUKI ET AL) 3 February 1998 (1998-02-03) claims 1,2	1-10
A	THOMAS S ET AL: "THERMAL DIFFUSIVITY OF SOLIDS BY PHOTOACOUSTIC CELL ROTATION AND PHASE LAG MEASUREMENT" REVIEW OF SCIENTIFIC INSTRUMENTS, AMERICAN INSTITUTE OF PHYSICS, NEW YORK, US, vol. 66, no. 7, 1 July 1995 (1995-07-01), pages 3907-3908, XP000524293 ISSN: 0034-6748 the whole document	1-10
A	US 5 586 824 A (BARKYOUUMB JOHN ET AL) 24 December 1996 (1996-12-24) column 4, line 9 - column 5, line 20; figure 3	1-10

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search 28 May 2004	Date of mailing of the International search report 04/06/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Thomte, M

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50854

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Information on patent family members

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